

WHAT IS CLAIMED IS:

1. An authentication system used when stored information is manipulated, comprising:
- a host computer comprising:
 - input means for inputting a user's instruction;
 - command output means for generating from the user's instruction an instruction command which requests a predetermined processing to be executed and for outputting it; and
 - communication means for communicating with an external unit; and
 - a fingerprint identification apparatus comprising:
 - communication means for communicating with said host computer;
 - processing control means for executing a predetermined processing according to the instruction command input from said host computer by said communication means;
 - fingerprint detection means for detecting a fingerprint and for generating fingerprint data;
 - storage-information recording means for recording the fingerprint data and storage information related to the fingerprint data; and
 - fingerprint identification means for verifying

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fingerprint data detected by said fingerprint detection means with the fingerprint data recorded by said storage-information recording means.

2. An authentication system according to Claim 1, wherein said storage-information recording means allows recorded storage information to be accessed only once immediately after the fingerprint-identification result is affirmative.

3. An authentication system according to Claim 1, wherein said storage-information recording means stores a private key generated by the public-key encryption method.

4. An authentication system according to Claim 1, wherein said fingerprint identification apparatus further comprises encryption processing means for generating an encryption key, for performing encryption by the use of the encryption key, and for performing decryption.

5. An authentication system according to Claim 4, wherein said encryption processing means generates a public key and a private key according to the public-key encryption method, and decrypts an encrypted text by the use of the private key.

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6. A fingerprint identification apparatus in an authentication system used when stored information is manipulated, comprising:

communication means for communicating with a host computer;

processing control means for executing a predetermined processing according to an instruction command input from the host computer by said communication means;

fingerprint detection means for detecting a fingerprint and for generating fingerprint data;

storage-information recording means for recording the fingerprint data and storage information related to the fingerprint data; and

fingerprint identification means for verifying fingerprint data detected by said fingerprint detection means with the fingerprint data recorded by said storage-information recording means.

7. A fingerprint identification apparatus according to Claim 6, wherein said storage-information recording means allows recorded storage information to be accessed only once immediately after the fingerprint-identification result is affirmative.

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8. A fingerprint identification apparatus according to Claim 6, wherein said fingerprint identification apparatus further comprises encryption processing means for generating an encryption key, for performing encryption by the use of the encryption key, and for performing decryption.

9. An authentication method used when stored information is manipulated, comprising the steps of:

a host computer informing a user of a fingerprint-identification request according to a user's instruction and issuing a fingerprint-identification instruction command to a fingerprint identification apparatus;

the fingerprint identification apparatus reading a fingerprint after the user places a finger on the fingerprint identification apparatus, verifying the read fingerprint with a stored fingerprint, and sending a fingerprint-identification result to the host computer;

the host computer allowing the user to specify the next instruction when the result is affirmative, and issuing the instruction command corresponding to the next instruction; and

the fingerprint identification apparatus accessing storage information according to the instruction command and executing a predetermined processing.

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10. An authentication method according to Claim 9, wherein, in the step of the fingerprint identification apparatus accessing the storage information according to the instruction command and executing a predetermined processing, the storage information is allowed to be accessed only once immediately after the fingerprint-identification result is affirmative.

11. An authentication method according to Claim 9, wherein the storage information includes a private key generated by the public-key encryption method, and in the step of the fingerprint identification apparatus accessing the storage information according to the instruction command and executing a predetermined processing, a predetermined encrypted text is decrypted by the use of the private key.

12. An authentication method according to Claim 9, wherein the storage information includes a private key generated by the public-key encryption method, and in the step of the fingerprint identification apparatus accessing the storage information according to the instruction command and executing a predetermined processing, a public key and a private key are generated by the public-key encryption method and the private key is stored.

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13. An authentication method used when stored information is manipulated, comprising the steps of:
issuing a fingerprint-identification instruction command;

receiving the result of the fingerprint identification performed according to the command;

allowing the user to specify the next instruction when the fingerprint identification result is affirmative; and

issuing the instruction command of the next instruction to allow the storage information corresponding to the instruction command to be accessed.

14. An authentication method according to Claim 13, wherein the storage information corresponding to the instruction command is allowed to be accessed only once immediately after the fingerprint identification result is affirmative.

15. An authentication method according to Claim 13, wherein the storage information includes a private key generated by the public-key encryption method, and

the storage information is accessed when a predetermined encrypted text is decrypted by the use of the private key.

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16. An authentication method according to Claim 13,
wherein the storage information includes a private key
generated by the public-key encryption method, and

the storage information is accessed, when a public key
and a private key are generated by the public-key encryption
method and the private key is stored.

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